What is claimed is:

1. A composition for the controlled release of an antineoplastic agent and an immunostimulant comprising an antineoplastic agent and an immunostimulant dispersed throughout a matrix wherein said composition is the hydration reaction product of an aqueous mixture comprised of:

an inorganic compound capable of undergoing hydration and/or crystallization,
an antineoplastic agent,
an immunostimulant, and
at least one of: a matrix polymer, a complexing agent, and a conditioning agent.

2. A composition as in claim 1 wherein said inorganic compound capable of undergoing hydration and/or crystallization is calcium sulfate hemihydrate.

3 A composition as in claim 1 wherein said matrix polymer is selected from the group onsisting of chondroitin sulfate, hyaluronic acid, dextran sulfate, pentosan polysulfate, polyethylene glycol, polyvinylpyrrolidone, gelatin and fibrinogen.

4. A composition as in claim 1 wherein said matrix polymer is hyaluronic acid.

5. A composition as in claim 1 wherein said antineoplastic agent is selected from the group consisting of carmustin, paclitaxel, doxorubicin, cisplatin, ifosfamide, cytoxan, carboplatin, methotrexate, leuprolide, bleomycin, and 5-flourouracil (5-FU).

6. A composition as in claim 1 wherein said antineoplastic agent is cisplatin.

7. A composition as in claim 1 wherein said antineoplastic agent is 5-FU.

8. A composition as in claim 1 wherein said immunostimulant is GM-CSF.

9. A composition as in claim 1 wherein said antineoplastic agent is an apoptosis inducer.

10. A composition as in claim 1 wherein said delivery system is in the form of matrix beads or microgranules, or a slurry.

11. A composition as in claim 1 wherein said antineoplastic agent and said immunostimulant are each formulated in a separate matrix and the matrices are mixed together.

12. A composition for the controlled release of cisplatin and GM-CSF comprising cisplatin and GM-CSF dispersed throughout a calcium sulfate dihydrate matrix wherein said composition is the hydration reaction product of an aqueous mixture comprised of:

calcium sulfate hemihydrate,

cisplatin,

GM-CSF, and

a matrix polymer.

13. A composition for the controlled release of a radiation potentiator comprising a radiation potentiator dispersed throughout a matrix wherein said composition is the hydration reaction product of an aqueous mixture comprised of:

an inorganic compound capable of undergoing hydration and/or crystallization,

a radiation potentiator, and

at least one of: a matrix polymer, a complexing agent, and a conditioning agent.

14. A composition as in claim 13 further comprising a radioisotope.

15. A composition as in claim 13 wherein said radiation potentiator is paclitaxel.

16. A composition as in claim 14 wherein said radioisotope and said radiation potentiator are each formulated in a separate matrix.

17. A composition for the controlled release of paclitaxel comprising paclitaxel dispersed throughout a calcium sulfate dihydrate matrix wherein said composition is the hydration reaction product of an aqueous mixture comprised of :

calcium sulfate hemihydrate,

paclitaxel, and

a matrix polymer.

18. A composition as in claim 13 wherein said delivery system is in the form of matrix beads or microgranules, or a slurry.

19. A method of treating a solid tumor in a mammal comprising:
administering to said mammal a resorbable delivery system for sustained release of i) an antineoplastic agent and ii) an immunostimulant

20. A method as in claim 19 wherein said administering is done by injecting said delivery system intra-tumorally or peri-tumorally.

21. A method as in claim 19 wherein said administering is done by injecting said delivery system into the tumor vasculature.

22. A method as in claim 19 wherein said administering is done by injecting said delivery system into a cavity left by tumor resection.

23. A method as in claim 19 wherein said delivery system is in the form of matrix beads or microgranules.

24. A method as in claim 19 wherein said administering step comprises administering said antineoplastic agent and said immunostimulant in separate sustained release delivery systems.

25. A method as in claim 19 wherein said antineoplastic agent is selected from the group consisting of carmustin, cisplatin, paclitaxel, and doxorubicin.

26. A method as in claim 19 wherein said immunostimulant is selected from the group consisting of LPS, BCG, IL-1, IL-2, GM-CSF, and TNF-alpha.

27. A method as in claim 19 wherein said immunostimulant is IL-2.

28. A method as in claim 19 wherein said immunostimulant is GM-CSF.

29. A method as in claim 19 wherein said antineoplastic agent is cisplatin and said immunostimulant is GM-CSF.

30. A method as in claim 19 wherein said antineoplastic agent is an apoptosis inducer.

31. A method as in claim 19 wherein said immunostimulant is a genetic construct that encodes an immunostimulant.

32. A method as in claim 19 wherein said antineoplastic agent is cisplatin.

33. A method as in claim 19 wherein said tumor is a tumor associated with a cancer selected from the group consisting of: skin cancer, breast cancer, head and neck cancer, gynecological cancer, urological and male genital cancer, bladder cancer, prostate cancer, bone cancer, cancers of the endocrine glands, cancers of the alimentary canal, cancers of the major digestive glands/organs, CNS cancer, and lung cancer.

34. A method as in claim 19 wherein said tumor is selected from the group consisting of prostate, breast, brain, bladder, head and neck tumors.

35. A method as in claim 19 wherein said delivery system is administered by injection.

36. A method as in claim 19 wherein said delivery system is administered by cannula or endoscope.

37. A method as in claim 19 wherein said administering also includes administering systemically the same or a different antineoplastic agent that is administered locally.

38. A method as in claim 19 wherein said administering includes administering the delivery system locally and administering systemically an antineoplastic agent and/or the immunostimulant.

39. A method as in claim 19 wherein said administering includes administering a delivery system including an apoptosis inducer and an immunostimulant.

40. A method as in claim 19 wherein said resorbable delivery system for sustained release of an antineoplastic agent and an immunostimulant comprises a composition for the controlled release of an antineoplastic agent and an immunostimulant comprising an antineoplastic agent and an immunostimulant dispersed throughout a matrix wherein said composition is the hydration reaction product of an aqueous mixture comprised of:

an inorganic compound capable of undergoing hydration and/or crystallization,
an antineoplastic agent,
an immunostimulant, and
at least one of: a matrix polymer, a complexing agent, and a conditioning agent.

41. A method as in claim 40 wherein said inorganic compound is calcium sulfate hemihydrate.

42. A method of treating a solid tumor in a mammal comprising:

a) administering to said mammal a resorbable delivery system for sustained release of a radiation potentiator, and

b) irradiating said tumor.

43. A method as in claim 42 wherein said administering is done intra-tumorally or peri-tumorally.

44. A method as in claim 42 wherein said administering is done by injecting said delivery system into the tumor vasculature.

45. A method as in claim 42 wherein said administering is done by injecting said delivery system into a cavity left by tumor resection.

46. A method as in claim 42 wherein said delivery system is in the form of matrix beads or microgranules.

47. A method as in claim 42 wherein said radiation potentiator is selected from the group consisting of paclitaxel, nimorazole, metronidazole, and 5,6-dimethylxanthenone-4-acetic acid.

48. A method as in claim 42 wherein said radiation potentiator is paclitaxel.

49. A method as in claim 42 wherein said radiation potentiator is metronidazole.

50. A method as in claim 42 wherein said irradiating step comprises administering a resorbable delivery system for sustained release of a radioisotope.

51. A method as in claim 50 wherein said radioisotope is selected from the group consisting of Pd-103, I-125 and Ir-192.

52. A method as in claim 42 wherein said tumor is a tumor associated with a cancer selected from the group consisting of: skin cancer, breast cancer, head and neck cancer, gynecological cancer, urological and male genital cancer, bladder cancer, prostate cancer, bone cancer, cancers of the endocrine glands, cancers of the alimentary canal, cancers of the major digestive glands/organs, CNS cancer, and lung cancer.

53. A method as in claim wherein said tumor is selected from the group consisting of prostate, breast, bladder, brain, head and neck tumors.

54. A method as in claim 42 wherein said delivery system is administered by direct injection.

55. A method as in claim 42 wherein said delivery system is administered by cannula or endoscope.

56. A method as in claim 42 wherein said administering includes administering the delivery system locally and administering systemically the same or a different radiation potentiator.

57. A method as in claim 42 wherein said resorbable delivery system for sustained release of an antineoplastic agent and an immunostimulant comprises a composition for the controlled release of a radiation potentiator comprising a radiation potentiator dispersed throughout a matrix wherein said composition is the hydration reaction product of an aqueous mixture comprised of:

an inorganic compound capable of undergoing hydration and/or crystallization,
a radiation potentiator, and
at least one of: a matrix polymer, a complexing agent, and a conditioning agent.

58. A method as in claim 57 wherein said inorganic compound is calcium sulfate hemihydrate.

59. A method of treating a tumor in a mammal comprising:

a) treating *ex vivo* tumor cells from said mammal with an antineoplastic agent, and
b) administering to said mammal said tumor cells treated in step a) and
c) administering to said mammal a resorbable delivery system for sustained release of an immunostimulant.

60. A method as in claim 59 wherein said resorbable delivery system for sustained release of an immunostimulant includes tumor cells treated in step a), and an immunostimulant.

61. A method as in claim 59 wherein said immunostimulant is GM-CSF

62. A method as is claim 59 wherein said delivery system is in the form of microgranules.

63. A method as in claim 59 wherein said administration is by injection.

64. A method as in claim 59 wherein said administering is done by injecting said delivery system intra-tumorally or peri-tumorally.

65. A method as in claim 59 wherein said administering is done by injecting said delivery system into the tumor vasculature.

66. A method as in claim 59 wherein said administering is done by injecting said delivery system into a cavity left by tumor resection.

67. A method as in claim 59 wherein said administration is by subcutaneous injection.

68. A method as in claim 59 wherein said immunostimulant is of microbiological origin.